Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_

**HW #83 – GRE 601 & MEA 501**

FORM A

Geometry

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| --- | --- |
| 1.  a. Explain what ‘meters per second’ means:  b. In the graph to the right, when t = 15, what is Enrique’s distance?  c. If Fred goes 100 meters in 20 seconds, how many meters does he go in 1 second? | 2. |
| 4. Find the perimeter AND the area of the figure below.  **1. Label the missing sides**  **2. Find:**  **a. Perimeter*:*** *all the way around (Add all the sides)*  **b. Area:** s*pace inside (length x width)* | |
| 7. Devin took out $45,000 in student loans from Sallie Mae, at an annual interest rate of 8%. After one year, how much will Devin owe Sallie Mae?  *Devin will owe $45,000 AND an additional 8% of $45,000.*  *Write that as a math sentence…* | 8. What is the perimeter of a **square** that has an area of 49 square inches?  **In a square, all sides are equal!**  **A = s x s**  **49 = s x s** |
| 5.  a. What is the formula for the area of a rectangle?  b. What is the formula for the area of a triangle?  c. What is the length of the rectangle to the right?  d. What is the width of the rectangle to the right?  e. What is the height of the triangles to the right?  f. What is the base of the triangle to the right? | 6. |
| 9. In the standard (x, y) coordinate plane, a line has the equation 3x + y = 8. Find the equation of the line that is **perpendicular** to the first line and passes through the point (2, 0).  **1. *Rearrange to the form:* y = mx + b**  **2.** *Identify the* ***slope*** *the* ***perpendicular*** *(opposite/recip)* ***slope***  ***3. Plug in:*** *perpendicular slope; x-value; y-value*  *4.* ***Solve for:*** *‘b’*  *5.* ***Re-write*** *y = mx + b with new slope and ‘b’* | 10. A **circle** has an **area** of 16π. What is the **perimeter** of the smallest possible **square** that can contain it?  **A = πr2** *radius is ½ of the diameter* **Perimeter = 4s**  **1. solve for ‘r’** *in*  *2. Once you have ‘r’, multiply it by 2 to get the*  *diameter of the circle. The diameter the same*  *as the* **side** *of the square.*  *3. Plug the* **side** *length into the* **perimeter**  *formula* |
| 11. Find the length of the right triangle’s hypotenuse:  *Soh Cah Toa*  52˚  14 cm | 12. **How much longer** is the **perimeter** than the **diagonal** of a rectangle that has a width of 4 meters and a length of 7 meters? P = 2(l) + 2(w) a2 + b2 = c2  4  5 |

**HW #84 NCP 508, 701 & XEI 601**

FORM A

Geometry

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

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| 1. List three values that could satisfy ‘x’ in the expression x > 1. 2. Identify the expression that has the **least value** **in each pair**:   a.  or  b.  or  c.  or | 1. *Choose a positive value for x and plug it in to each answer choice.* 2. *Which one has the smallest value?* |
| 1. Identify the **Inverse** *(opposite)* Operation for: 2. Multiplication 3. Subtraction 4. Addition 5. Division 6. In the expression ***z = 3xy2 + 2*** 7. What operation is binding the ***x*** to the ***y2*** 8. What operation is binding the ***3*** to the ***x***? 9. What operation can separate the ***3, x***, and ***y2***? 10. What operation is attaching the 2 to the ***3xy2***? 11. What operation will undo that attachment? | 6. |
| 7.  a. Give three examples of integers:  b. Give three non-examples of integers:  c. Give three examples of even integers:  d. Give three non-examples of even integers: | 8. *choose an even AND an odd value to plug in for n.* |
| 9. A truck driver had planned on driving from Portland, OR, to Seattle, WA, which is **173 miles**. Instead, he was instructed to drive from Portland to Eugene, OR, which is **111 miles**. On a map, each **inch is equal to 30 miles**. On the map, **how many inches longer** is the trip to Seattle than to Eugene? | 10. Calvert’s gym locker has 5 numbers between the digits of **0 and 9**. Each number may only be used once in the combination. How many different combinations can be made?  \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ |
| 11. Find **all** the missing sides of the right triangle:  Soh Cah Toa  60˚  8m  x  y | 12. A **square** has a **perimeter of 28 inches**. What is the length of the square’s **diagonal**?  **P = 4s diagonal: a2 + b2 = c2**  s  s |
| 13. What would be the **area of a square** pizza box that had had to fit a **12” (diameter)** pizza with a one- inch margin on each side of the box?  1  1  12  A = 4s | 14. Mr. Warbuck’s had invested **$24,500** in the stock market. Unfortunately, the market went down and Mr. Warbuck’s **lost 5% of his investment.** **How much money does Mr. Warbuck’s have left**? |
| 15. Find the **slope** of a line that goes through points **A(0, -5)** and **B(4, 7)** | 16. In rectangle ABCD, the **length is 2 units longer than the width**. If the **perimeter is 52** units, **what is the area** of the rectangle?  *P = 2(l) + 2(w) A = l x w*  w  2 + w |